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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,754	08/17/2001	Emil Kamieniecki	QCS-001DV3	5384

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EXAMINER
HOLLINGTON, JERMELE M

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/932,754	Applicant(s) KAMIENIECKI ET AL.	
	Examiner Jermele M. Hollington	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *53-57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *53-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☒ The proposed drawing correction filed on *04 March 2003* is: a)☒ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Drawings

1. The drawings were received on March 4, 2003. These drawings are approved.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 53-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamieniecki et al (5091691) in view of Yoshino et al (5708365).

Regarding claim 53, Kamieniecki discloses [see Fig. 17] an apparatus for making surface photovoltage measurements of a semiconductor comprising a sealed chamber (represented as enclosure 197) [see column 12 lines 15-19] for processing the semiconductor wafer (represented as specimen 11) [see column 4 lines 34-37 and column 6 lines 32-36] having a first surface and a

second surface [see Fig. 17] and a head assembly (represented as arrangement 191) having a modulated light source (43) exposing [via glass plate 201] at least a portion of the semiconductor wafer (11) to light having a wavelength and modulated at a frequency [see column 7 lines 29-35 and lines 49-62 and column 12 lines 39-42] and a surface photovoltage sensor (represented as reference electrode assembly 199) comprising a plurality of electrodes (transparent plate 201, edge pick up areas 205, 207 and 209 and central pickup area 203) positioned adjacent to the first surface [see Fig. 17] to detect a surface photovoltage [see Abstract lines 6-8] induced at the first surface of the semiconductor wafer (11) in response to the light [via light source 43] without contacting the wafer (11) [see column 12 lines 39-50], the plurality of electrodes (201, 203, 205, 207 and 209) sufficient for detecting the surface photo-voltage on the first surface and the surface photo-voltage sensor (199) of head assembly (191) located within the sealed chamber (197). However, Kamieniecki et al do not disclose a conveying apparatus as claimed. Yoshino et al disclose [see Fig. 2] a semiconductor wafer fabrication system comprising a modulated light source (Halogen Light Source) exposing at least a portion of a semiconductor wafer (Silicon Wafer), a surface photo voltage sensor (SPV Transducer) comprising a plurality of electrodes (SPV signal) positioned adjacent a first surface to detect a surface photo voltage induced at the first surface of the semiconductor wafer (Silicon Wafer) and a conveying apparatus (combination of Wafer Chuck and Moving Stage) conveying the wafer (Silicon Wafer) adjacent the voltage sensor (SPV Transducer). Further, Yoshino et al teach that the addition of conveying apparatus is advantageous because it moves the wafer around so that the SPV sensor (transducer) is able to evaluate the dielectric breakdown of an oxide layer on the wafer. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the apparatus

of Kamieniecki et al by adding a conveying apparatus as taught by Yoshino et al in order to move the wafer around so that the SPV sensor (transducer) is able to evaluate the dielectric breakdown of the wafer.

Regarding claims 54-56, Kamieniecki discloses the sealed chamber (197) as a reduced pressure chamber, a chemically reactive gas chamber or an inert environment chamber [see column 12 lines 15-16 and column 13 lines 42-46].

Regarding claim 57, Kamieniecki discloses [see fig. 17] the head assembly (191) is entirely located within the sealed chamber (197).

Conclusion

Applicant's arguments with respect to claims 53-57 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (703) 305-1653. The examiner can normally be reached on M-F (9:00-4:30 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (703) 308-1233. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

Jermele M. Hollington
Examiner
Art Unit 2829

JMH
August 13, 2003

KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
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